In the claims:

Please amend the claims as follows:

(Currently Amended) 1. A method for managing a cache of entries ~~containing~~ of seat availability information for a seat on an airline, comprises:

determining, based on a criterion for availability information, which criterion is determined based on needs of a travel planning system that makes queries to the cache for obtaining seat availability information, whether a stored, answer in the cache is stale and, if the ~~retrieved~~ stored answer is stale,

sending an availability query to ~~an~~ a source of availability information for ~~an~~ the airline based on determining that the answer was stale.

(Original) 2. The method of claim 1 wherein determining if the stored answer is stale comprises:

monitoring availability queries made to the cache by a travel planning system to determine which flights, sets of flights, the flights for a certain day, date, or market have a high demand for availability information.

(Currently Amended)) 3. The method of claim 1 wherein determining if the stored answer is stale comprises:

scheduling a list of keys where ~~a~~ the list of keys are identifiers of specific instances of flights ~~of entries~~ to update or add, and for each ~~entry~~ key on the list in the order given,

submitting a query to the availability source; and

storing the result in the cache, by updating an entry if present and adding an entry if not present in the cache.

(Original) 4. The method of claim 1 wherein determining if the stored answer is stale comprises:

scheduling multiple lists, by processes one entry from each list by a round-robin polling through the lists in turn until one entry has been processed from each list, and

returning to the first list to process the next entry;

generated an entry for each entry on the list in the order given, by

submitting a query to the availability source; and

storing the result in the cache, by updating an entry if present and adding an entry if not present in the cache.

(Currently Amended)) 5. An availability system used for a travel planning system comprises:

a cache including a plurality of entries of availability information of seats for a mode of transportation; and

a cache manager that manages a quality level of entry information in the cache by proactively populating the cache to maintain a high quality level of entries of availability information in the cache, with the quality level determined by comparing entries in the cache to criterion related to needs of a travel planning system that makes queries to the cache for obtaining seat availability information.

(Original) 6. The availability system of claim 5 wherein the cache manager determines when an entry should be added to the cache.

(Original) 7. The availability system of claim 5 wherein the cache manager determines when an entry should be deleted from the cache.

(Original) 8. The availability system of claim 5 wherein the cache manager determines when an entry already in the cache should be modified.

(Original) 9. The availability system of claim 5 wherein entries to be added, modified, or deleted are obtained by asynchronous notification from external systems.

(Original) 10. The availability system of claim 9 wherein entries to be added, modified, or deleted are taken from a list or multiple lists of predetermined entries.

(Original) 11. The availability system of claim 10 wherein the entries in the list include predetermined orderings or priorities.

(Original) 12. The availability system of claim 10 wherein entries to be added, modified, or deleted are determined from the distribution or nature of availability queries posed to the cache.

(Original) 13. The availability system of claim 10 wherein entries to be added, modified, or deleted are determined by using a predictor or model of the availability queries which are likely to be posed or are likely to be useful in the future.

(Previously Amended) 14. The availability system of claim 13 wherein the predictor or model is based on a deterministic, probabilistic, or statistical classifier or predictor, databases or cache of

historical data or previously predicted information, simulations of various availability systems and actual availability data sources.

(Original) 15. The availability system of claim 10 wherein entries to be added, modified, or deleted are determined by comparing actual answers or cached answers to predictions made by a predictor or model of the availability information.

(Previously Amended) 16. The availability system of claim 13 wherein the predictor used to guide the cache manager operation predicts the rate of change or time of change of the seat availability.

(Original) 17. The availability system of claim 10 wherein entries to be added, modified, or deleted are determined by prior knowledge, such as busy travel days, important or busy markets, or busy travel times.

(Original) 18. The availability system of claim 10 wherein entries to be modified or deleted are determined by the date of travel for the seat in comparison to the current date.

(Currently Amended))19. A computer program product residing on a computer readable medium for managing a cache for predicting availability information for a mode of transportation, comprises instructions to cause a computer to:

determine whether a stored answer in the cache is stale, based on a determined criterion for availability information, which criterion is determined based on needs of a travel planning system that makes queries to the cache for obtaining seat availability information,; and,

update the stored answer in the cache when the stored answer is stale by sending an availability query to ~~an~~ a source of availability information for the mode of transportation.

(Previously Added) 20. The computer program product of claim 19 further comprising instructions to:

monitor availability queries made to the cache by a travel planning system to determine which flights, sets of flights, the flights for a certain day, date, or market have a high demand for availability information.

(Currently Amended))21. The computer program product of claim 19 further comprising instructions to:

schedule a list of keys where ~~a~~ the list of keys are identifiers of specific instances of flights ~~of entries~~ to update or add and for each entry on the list in the order given,

submit a query to the availability source; and

store the result in the cache, by updating an entry if present and adding an entry if not present in the cache.

(Previously Added) 22. The computer program product of claim 19 further comprising instructions to:

schedule multiple lists, by processes one entry from each list by a round-robin polling through the lists in turn until one entry has been processed from each list, and

return to the first list to process the next entry;

generate an entry for each entry on the list in the order given, by

submit a query to the availability source; and

store the result in the cache, by updating an entry if present and adding an entry if not present in the cache.

(Currently Amended) 23. A computer program product for determining seat availability in a travel planning system comprises instructions to cause a computer to:

cache entries of availability information of seats for a mode of transportation; and

manage entry information in the cache using criterion determined based on needs of a travel planning system that makes queries to the cache for seat availability information, to determine when an entry in the cache should be added, deleted or modified.

(Previously Added) 24. The computer program product of claim 23 wherein entries to be added, modified, or deleted are obtained by asynchronous notification from external systems.

(Previously Added) 25. The computer program product of claim 24 wherein entries to be added, modified, or deleted are taken from a list or multiple lists of predetermined entries.

(Previously Added) 26. The computer program product of claim 25 wherein the entries in the list include predetermined orderings or priorities.

(Previously Added) 27. The computer program product of claim 24 wherein entries to be added, modified, or deleted are determined from the distribution or nature of availability queries posed to the cache.

(Previously Added) 28. The computer program product of claim 24 wherein entries to be added, modified, or deleted are determined by using a predictor or model of availability queries which are likely to be posed or are likely to be useful in the future.

(Previously Added) 29. The computer program product of claim 28 wherein the predictor or model of availability queries likely to be posed is based on a at least one of deterministic, probabilistic, statistical classifier or predictor, databases, cache of historical data or previously predicted simulations of availability systems and actual availability data sources.

(Previously Added) 30. A method for managing availability information for a seat on an airline, comprises:

determining, which entries to add, delete, or update in the cache by monitoring and examining availability queries made to the cache by a travel planning system to determine which flights have a high demand for availability information;

updating entries in the cache based on if a flight is determined to have a higher than average or higher than expected demand.

(Previously Added) 31. The method of claim 39 wherein flights included sets flights, such as the flights for a certain day, date, or market that added to the cache earlier than it would have been otherwise, or it might be updated more often to make sure the information is fresh.

(Previously Added) 32. The method of claim 30 wherein further comprising:

observing and parsing queries made to the cache by a travel planning system; and

updating a list of entries queried along with a frequency count tallying the number of times each entry has been accessed; and

based on frequency of access determining whether the entry should be added or deleted from the cache, whether priority should be raised or lowered to freshen the data for that entry from the availability source more or less often.